



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_

Date: \_\_\_\_\_

Work Order update only 

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General				
Bending	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>	
Centre Not Concentric	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>	
Cracks	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>	
Crimp/Kink/Ripple/Wave	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>	
Cuffs	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>	
Crushing	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	Other <input type="checkbox"/>	
Heat Treat	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>		
Inspection Strip in Tube	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>			
Marks/Chatter	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>			
Turning Sequence	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>			
Wave/Twist in Tube	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>			

**Work Order ID** 103002

**\*103002\***

Page 2

June-12-13 9:24:07 AM

**Item ID:** D3245-042

Accept

**\*N900040100\***

Setup

Start

**\*NS1\***

**Revision ID:**

**Item Name:** Access Panel Assembly

Stop

**\*NS2\***

**Start Date:** 6/11/13    **Start Qty:** 4.00

**\*4\***

**Cust Item ID:**

**Required Date:** 6/11/13    **Req'd Qty:** 4.00

**\*4\***

**Customer:**

**Reference:**

**Approvals:**

**Process Plan:**

**Date:**

**Tooling:**

**Date:**

Run

Start

**\*NR1\***

**QC:**

**Date:**

**SPC (Y/N):**

**Date:**

Stop

**\*NR2\***

**Sequence ID/  
Work Center ID**

**Operation  
Description**

**Set Up/  
Run Hours**

**Tool ID**

**Tool #**

**Plan  
Code**

**Accept  
Qty**

**Reject  
Qty**

**Reject  
Number**

**Insp.  
Stamp**

130

Identify as per dwg & Stock Location:

0.00

*ST 2F2A*

*P 13/08/26 (4)*

**\*130\***

Packaging

Packaging

140

QC21- Final Inspection - Work Order Release

0.00

*MUS 13-08-26*

**\*140\***

QC

Quality Control

*Memo*

0.00

*AB 08/26*

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only 

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
NCR No. _____		Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
		Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
		Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	General				
Bending	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>	
Centre Not Concentric	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>	
Cracks	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>	
Crimp/Kink/Ripple/Wave	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>	
Cuffs	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>	
Crushing	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>		
Heat Treat	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>	
Inspection Strip in Tube	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>			
Marks/Chatter	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>			
Turning Sequence	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>			
Wave/Twist in Tube	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>			

# Picklist Print

June-12-13 9:24:06 AM

Page 1

Work Order ID: 103002

Parent Item: D3245-042

Parent Item Name: Access Panel Assembly

Start Date: 6/11/13

Required Date: 6/11/13

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev :A New Issue 07-09-11 JLM Verified By:EC  
IPP Rev:b ECN 1052 07-10-31 DD verified by:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3245-2 Panel		Manufactured	No			110	Each	6.0000	1	4	6	B/3/08/23	
				<u>Location</u>			<u>Loc Qty</u>						
				ST243			6						
					97333		6						
D3245-5 Door		Manufactured	No			110	Each	9.0000	1	4	6	B/103552 4x	
				<u>Location</u>			<u>Loc Qty</u>						
				GA			9						
					98293		9						
2350-18-C3Y RIGID RECEPTACLE		Purchased	No			110	Each	91.0000	8	32	6	E/3/08/23	
				<u>Location</u>			<u>Loc Qty</u>						
				ST396			91						
					124256		21						
					125677		50						
					19688		20						
MS20427M3-3 Rivet		Purchased	No			110	Each	2,163.0000	16	64	6	B/3/08/23	
				<u>Location</u>			<u>Loc Qty</u>						
				GA			44						
					121114		44						
				ST335			2119						
					124231		2119						
MS20615M3-3 Rivet		Purchased	No			110	Each	1,091.0000	9	36	6	E/3/08/23	
				<u>Location</u>			<u>Loc Qty</u>						
				ST312			1091						
					116188		2						
					118384 -		1089						

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

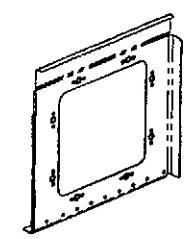
Work Order update only 

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
			Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				

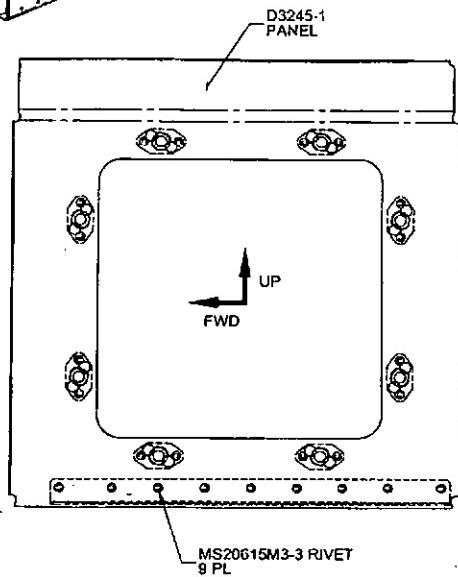
Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	<input type="checkbox"/>									
Doc/Data	<input type="checkbox"/>									
Equip/Tooling	<input type="checkbox"/>									
Handling/Pre	<input type="checkbox"/>									
Material	<input type="checkbox"/>									
Operator	<input type="checkbox"/>									
Offset/Setup	<input type="checkbox"/>									
Process	<input type="checkbox"/>									
Supplier	<input type="checkbox"/>									
Training	<input type="checkbox"/>									
Transport	<input type="checkbox"/>									
Unapproved	<input type="checkbox"/>									

## FAULT CATEGORY

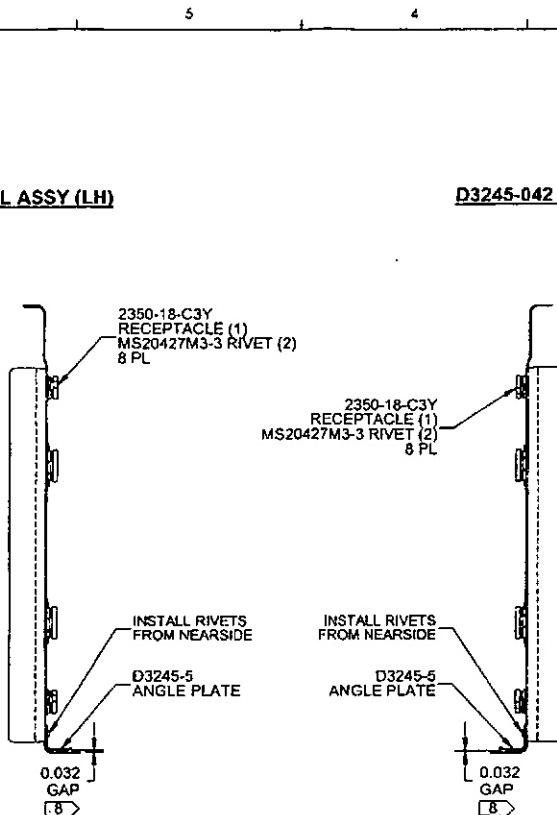
Landing Gear	General				
Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>	
Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>	
Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>	
Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>	
Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>	
Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	Other <input type="checkbox"/>	
Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>		
Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>			
Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>			
Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>			
Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>			



**D3245-041 ACCESS PANEL ASSY (LH)**

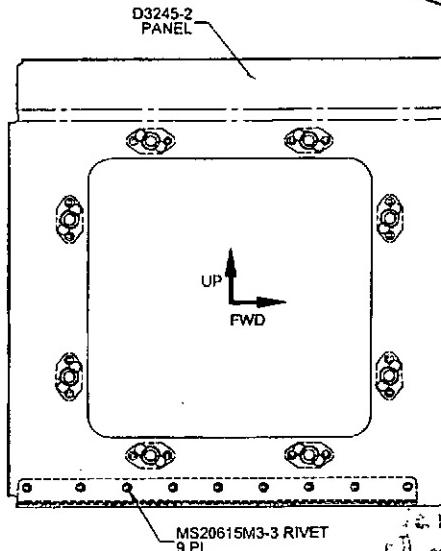
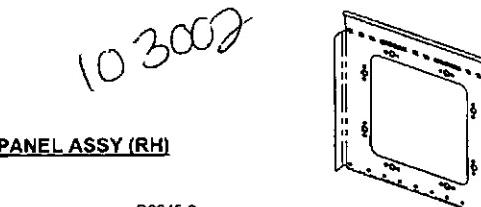


MS20615M3-3 RIVET  
9 PL



**D3245-042 ACCESS PANEL ASSY (RH)**

103002



QTY 041	QTY 042	P/N	DESCRIPTION
X	X	D3245-041	ACCESS PANEL ASSY (LH)
1	1	D3245-042	ACCESS PANEL ASSY (RH)
1	1	D3245-1	PANEL
1	1	D3245-2	PANEL
8	8	D3245-5	ANGLE PLATE
		2350-18-C3Y	RECEPTACLE
16	16	MS20427M3-3	RIVET
9	9	MS20615M3-3	RIVET

**A NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) ASSEMBLE IN ACCORDANCE WITH DART QSI 002
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3245-XX" AND B/N "BXXXXX" PER QSI 044 METHOD 6.1
- 7) WEIGHT: 0.83 lbs
- 8) TEMPORARILY INSERT A 0.032" GAUGE PLATE PRIOR TO RIVETING D3245-5 TO PANEL

D	CHANGED MATERIAL FOR D3245-7/9-11-13. REASON: PROCUREMENT, REF CAR12-09.	MB	12.10.16
C	ADDED NOTE B, SHEET 1, SPECIFIED RIVET ORIENTATION (UP TO DOWN) FROM 235-100-008-037 TO 235-100-008-052. HOLE SIZE WAS 0.096. 3 PLACES (06-6), HOLE SIZE WAS 0.119. 5 PLACES (D7-5). REF: PAR 12-165.	RP	12.04.11
B	REMOVE .004 HOLES FROM D3245-1A/F. REMOVE MS2106-LJK NUTPLATES & DURABLA BLACK GASKETS FROM D3245-1A/F. HOLES AND ITEMS ARE NOW PROVIDED FOR INSTALLATION. ASSIGN P/N'S TO GASKETS & REFORMAT DRAWING.	MB	07.10.02
A	NEW ISSUE	RF	04.01.27
REV.	DESCRIPTION	BY	DATE
DESIGN	1F	DART AEROSPACE LTD	
DRAWN	AS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	GP	DRAWING NO.	REV. D
MFG. APPR.		D3245	SHEET 1 OF 7
APPROVED	WJ	TITLE	SCALE
DE APPR.		ACCESS PANEL ASSY	NTS
DATE	12.10.16	COPYRIGHT © 2014 BY DART AEROSPACE LTD. THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL. IT MAY NOT BE COPIED OR DISCLOSED TO ANY OTHER PERSON OR COMPANY.	

6 7 1 6 5 1 4 3 2 1

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_

Date: \_\_\_\_\_

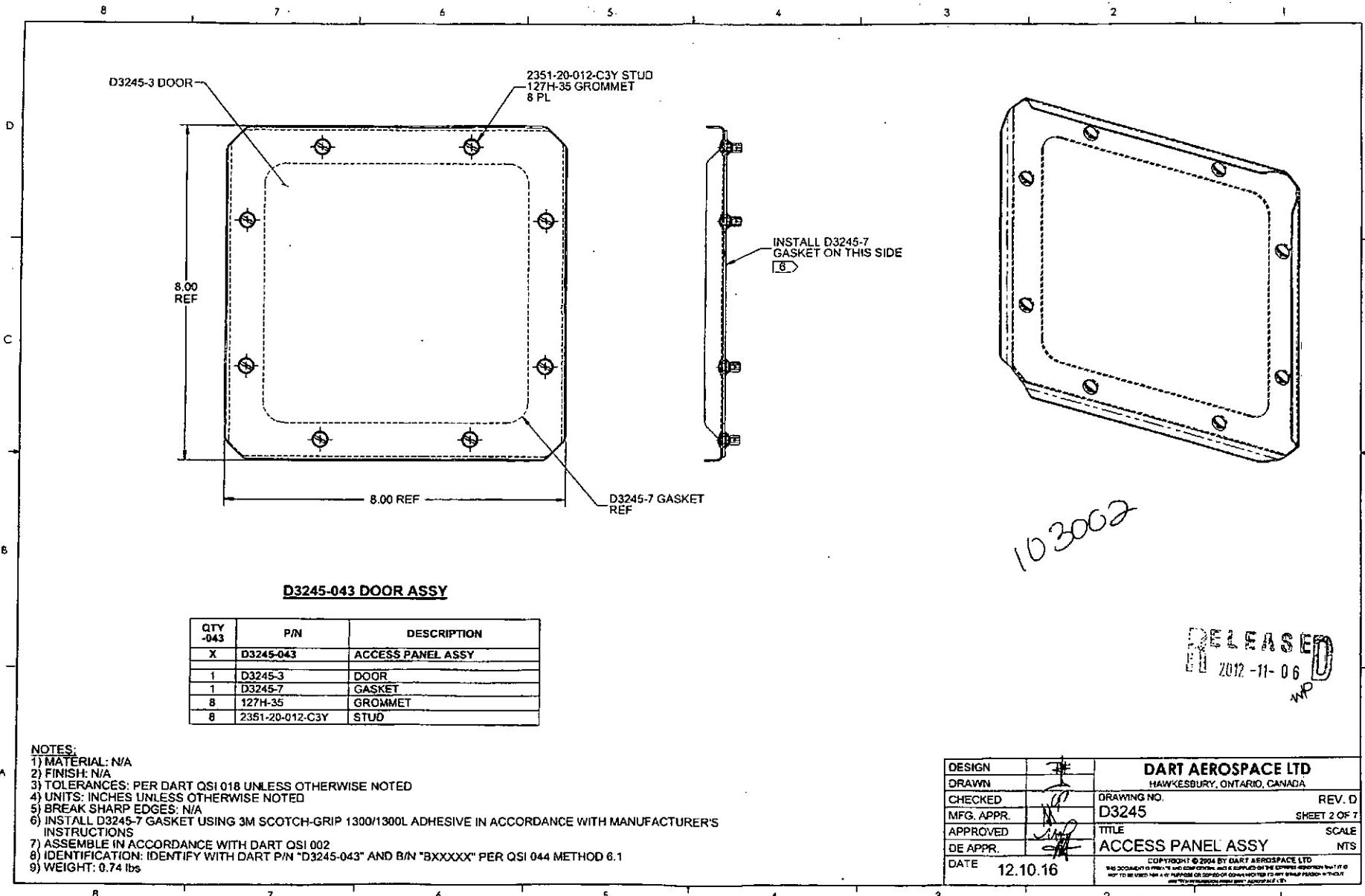
Work Order update only 

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Suspected Unapproved <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Other <input type="checkbox"/>			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence Wave/Twist in Tube	General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function	Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set Out of Calibration Out of Sequence	Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

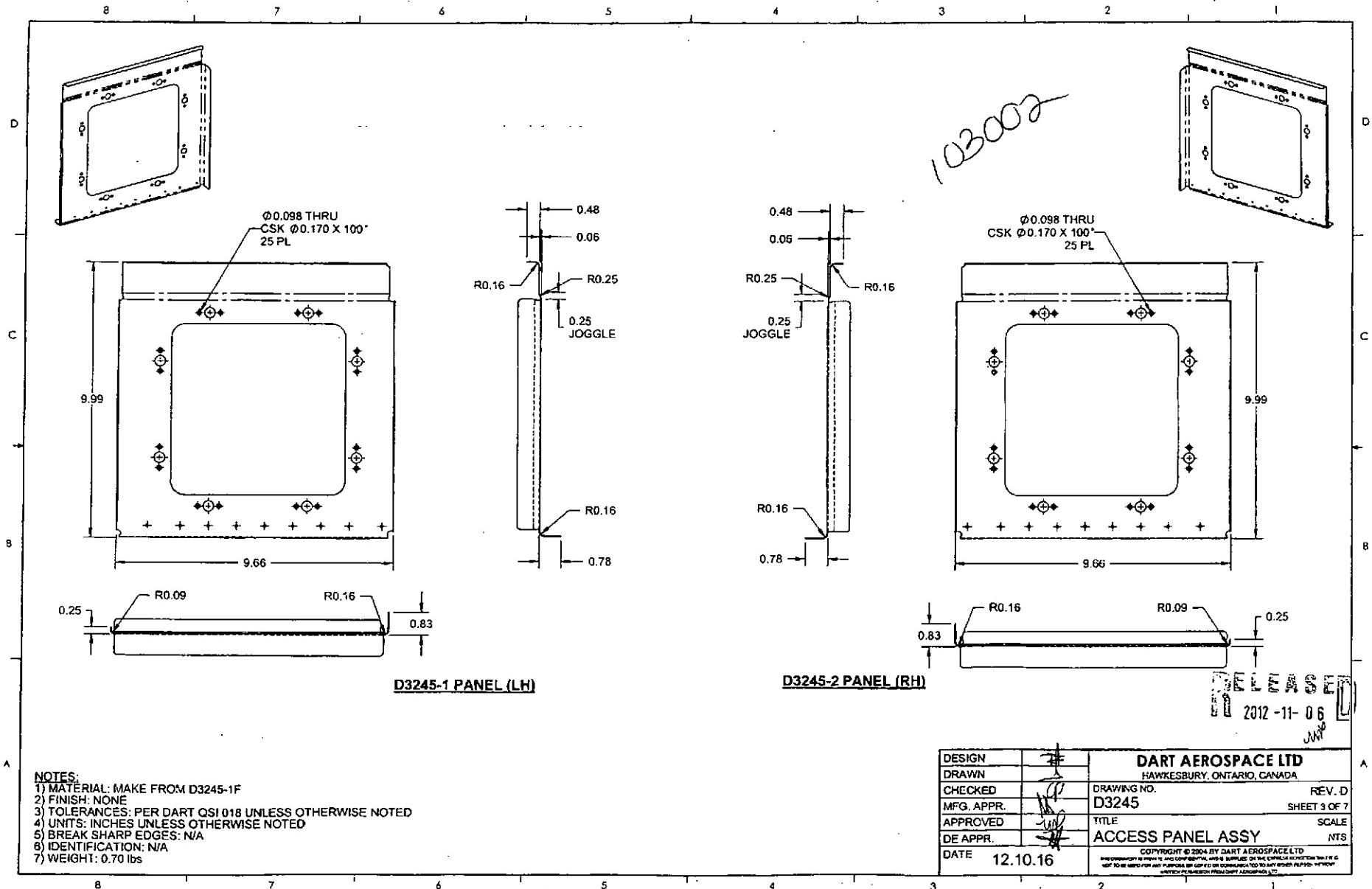
Work Order update only 

Work Order: _____	<b>DISPOSITION</b>	<b>AGAINST DEPARTMENT/PROCESS</b>							
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

Landing Gear	General		
Bending	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>
Centre Not Concentric	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>
Cracks	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>
Crimp/Kink/Ripple/Wave	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>
Cuffs	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>
Crushing	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>
Heat Treat	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>
Inspection Strip in Tube	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>	Pressure/Forced Set-up <input type="checkbox"/>
Marks/Chatter	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
Turning Sequence	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>	Weld <input type="checkbox"/>
Wave/Twist in Tube	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
			Other <input type="checkbox"/>



DESIGN	F	DART AEROSPACE LTD
DRAWN	X	HAWKESBURY, ONTARIO, CANADA
CHECKED	X	DRAWING NO. D
MFG. APPR.	X	D3245
APPROVED	X	REV. D
DE APPR.	X	SHEET 3 OF 7
DATE	12.10.16	TITLE
		SCALE
		NTS
		ACCESS PANEL ASSY
		Copyright © 2014 by DART Aerospace Ltd. Proprietary & Confidential. Not to be copied or communicated to any other party without written permission from DART Aerospace Ltd.

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

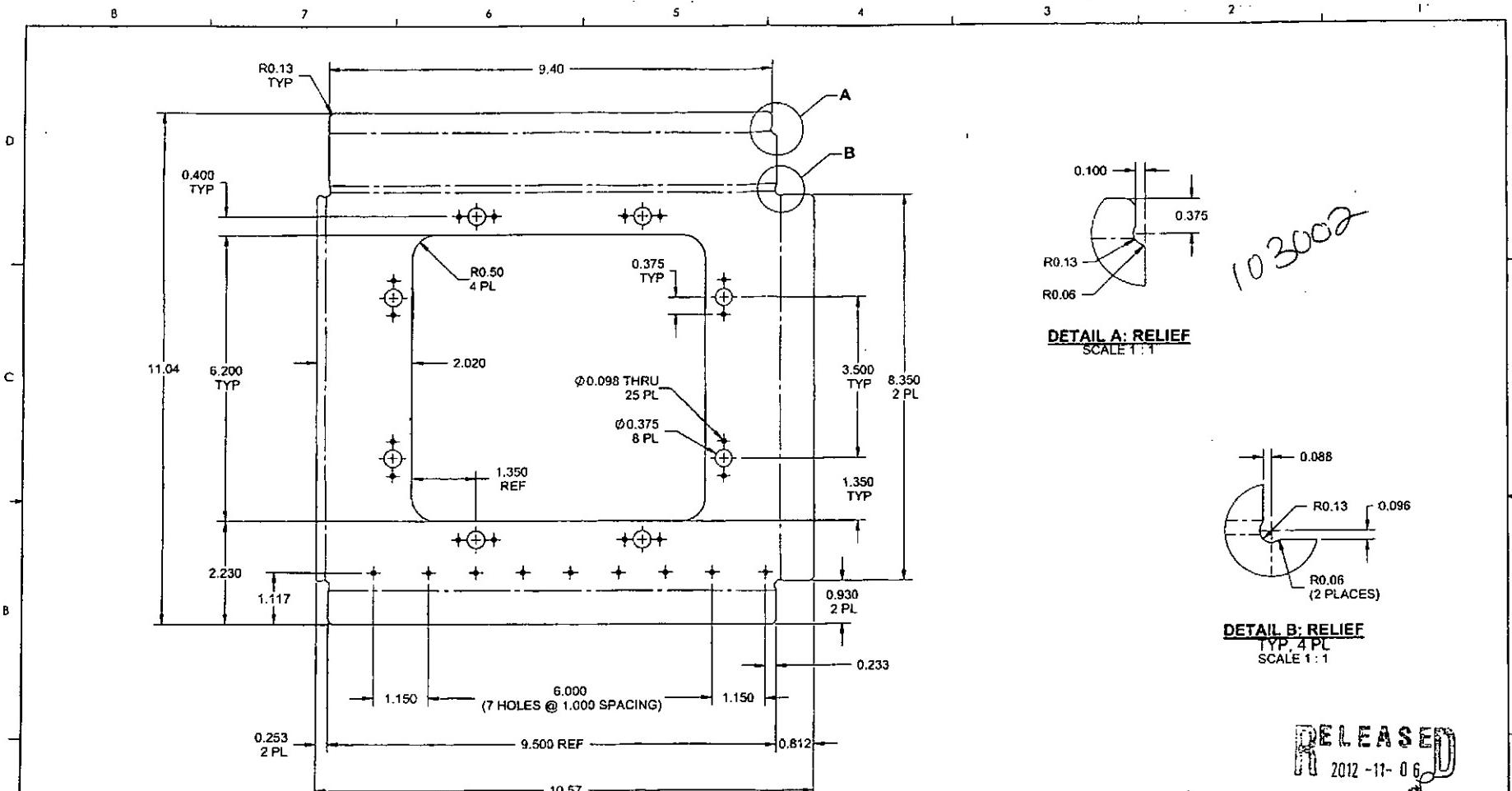
Work Order update only 

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Suspected Unapproved <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Other <input type="checkbox"/>	Other <input type="checkbox"/>		

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

## FAULT CATEGORY

Landing Gear	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence Wave/Twist in Tube	General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function	Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set Out of Calibration Out of Sequence	Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled
					Other



DESIGN	<u>3F</u>	DART AEROSPACE LTD	
DRAWN	<u>1</u>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<u>4P</u>	DRAWING NO. D3245 REV. D	
MFG. APPR.	<u>1</u>	SHEET 4 OF 7	
APPROVED	<u>JL</u>	TITLE ACCESS PANEL ASSY	
DE APPR.	<u>1</u>	SCALE NTS	
DATE	12.10.16		

© COPYRIGHT © 2014 BY DART AEROSPACE LTD.  
THIS DOCUMENT IS PROPERTY AND CONFIDENTIAL OF THE ABOVE COMPANY. IT IS  
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT  
THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**RELEASED**  
2012-11-06

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



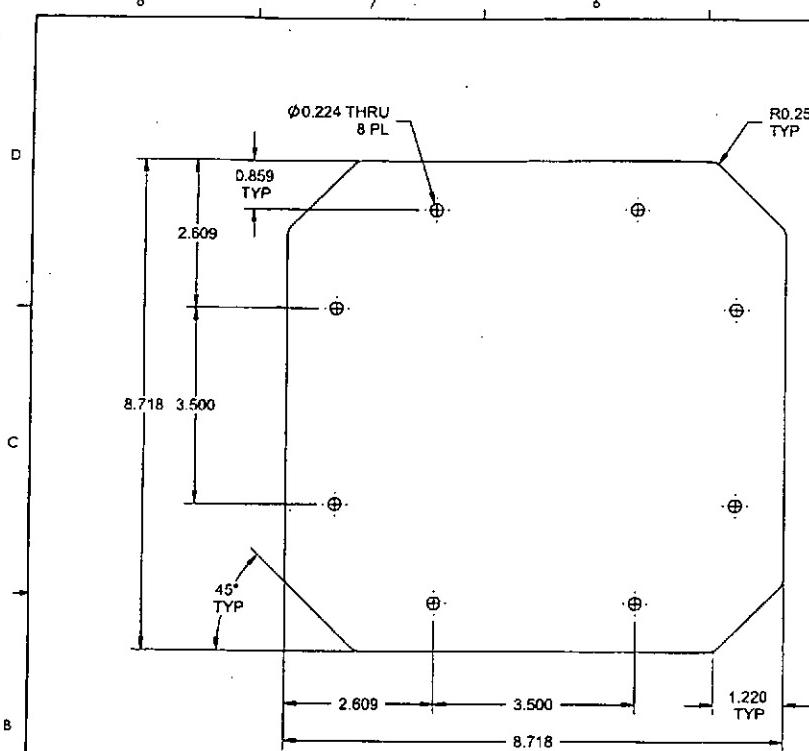
# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

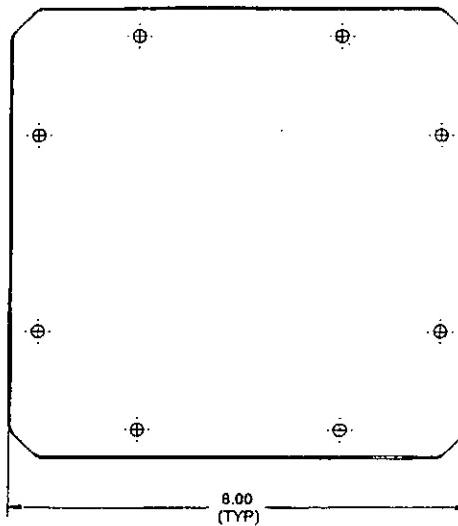
Date:

### Work Order update only

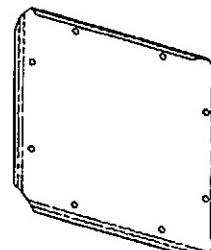
Work Order Update Only				Disposition		Against Department/Process							
Work Order:				Rework	<input type="checkbox"/>	Skid-tube	<input type="checkbox"/>	Crosstube	<input type="checkbox"/>	Water Jet	<input type="checkbox"/>	Engineering	<input type="checkbox"/>
Part No.				Scrap	<input type="checkbox"/>	Machining	<input type="checkbox"/>	Small Fab	<input type="checkbox"/>	Prod. Eng. Coor.	<input type="checkbox"/>	Quality	<input type="checkbox"/>
NCR No.				Use-as-is	<input type="checkbox"/>	Thermoforming	<input type="checkbox"/>	Finishing	<input type="checkbox"/>	Rec/Store/Packaging	<input type="checkbox"/>	Other	<input type="checkbox"/>
Suspected Unapproved					<input type="checkbox"/>	Large Fab	<input type="checkbox"/>	Composite	<input type="checkbox"/>	Supplier	<input type="checkbox"/>		<input type="checkbox"/>
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Design													
Doc/Data													
Equip/Tooling													
Handling/Pre													
Material													
Operator													
Offset/Setup													
Process													
Supplier													
Training													
Transport													
Unapproved													
Fault Category													
Landing Gear				General									
Bending		Bend		Folio/Program		Outside Dimensions		Pressure/Forced					
Centre Not Concentric		BOM/Route		Grain		Over/Under tolerance		Set-up					
Cracks		Broken/Damage/Defect		Hardware		Part Incorrect		Temperature/Cure					
Crimp/Kink/Ripple/Wave		Burrs		Inspection Incomplete/Unqualified		Part Lost/Missing		Weld					
Cuffs		Contamination		Instructions Incomplete/Unclear		Part Moved		Wrong Stock Pulled					
Crushing		Countersink		Misaligned/off center		Positioned Wrong							
Heat Treat		Cut Too Short		Mislabeled		Power Loss/Surge							
Inspection Strip in Tube		Drawing		Misread				Other					
Marks/Chatter		Drill Holes		Off-set									
Turning Sequence		Finish		Out of Calibration									
Wave/Twist in Tube		Fit/Function		Out of Sequence									



D3245-3F DOOR FLAT PATTERN



D3245-3 DOOR  
(MADE FROM D3245-3F)



**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.032 THICK, ANNEALED, 2B FINISH, PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 (REF. DART SPEC. M304S22GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.66 lbs

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO. D3245 REV. D	
MFG. APPR.	<i>[Signature]</i>	SHEET 5 OF 7	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ACCESS PANEL ASSY	NTS
DATE	12.10.16	COPYRIGHT © 2014 BY DART AEROSPACE LTD. THIS DOCUMENT IS PROPRIETARY AND IS SUPPLIED ON THE CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PROVIDED. NO COPIES ARE TO BE MADE.	

RELEASE  
2012-11-06  
*[Signature]*

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_

Date: \_\_\_\_\_

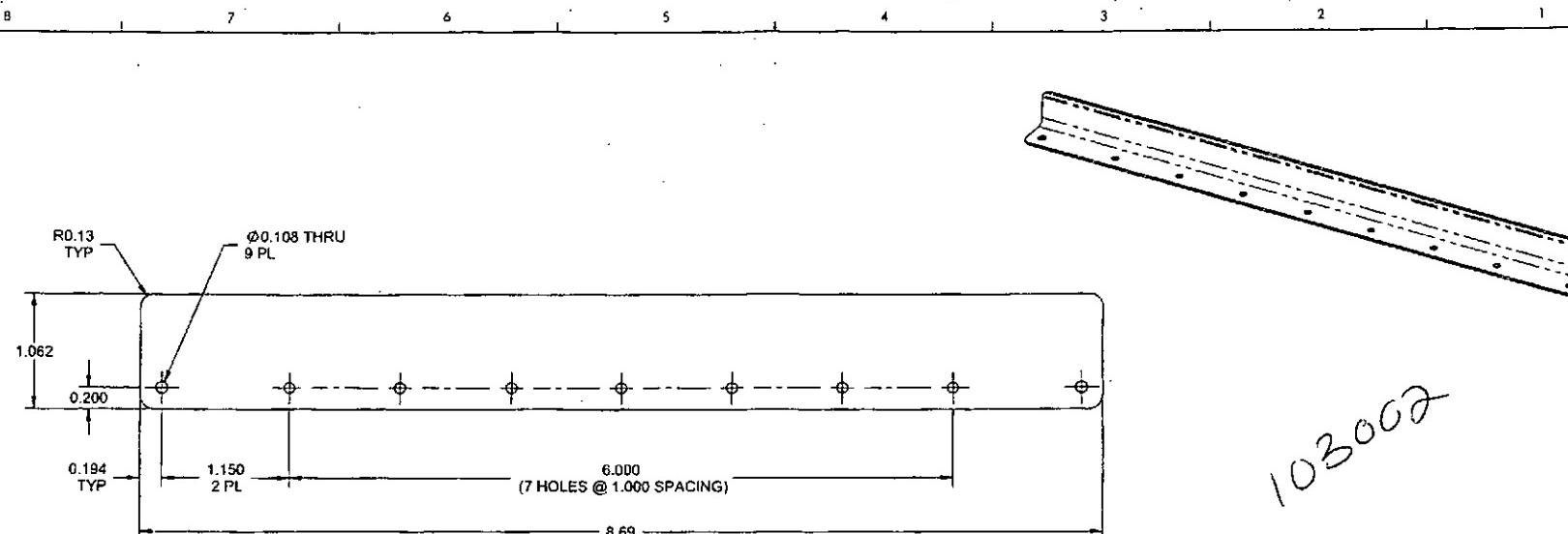
Work Order update only 

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	<b>DISPOSITION</b> Rework Scrap Use-as-is Suspected Unapproved	<b>AGAINST DEPARTMENT/PROCESS</b> Skid-tube Machining Thermoforming Large Fab Crosstube Small Fab Finishing Composite Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier Engineering Quality Other
---	--	--

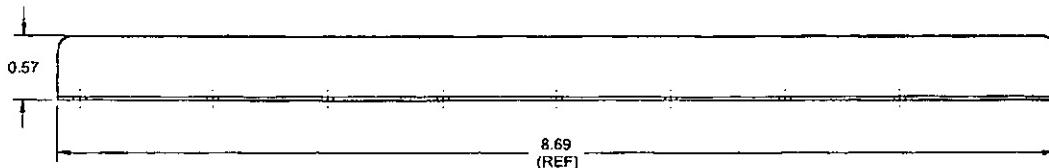
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

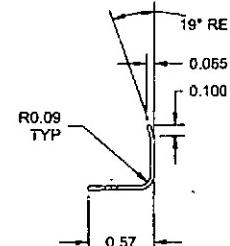
Landing Gear	General	Folio/Program	Outside Dimensions
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Pressure/Forced
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Set-up
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Weld
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Wrong Stock Pulled
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread	
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set	
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration	
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence	



D3245-5F FLAT PATTERN



D3245-5 ANGLE PLATE  
(MAKE FROM D3245-5F)



RELEASE  
2012-11-06  
MO

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.032 THICK, ANNEALED, 2B FINISH, PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 (REF. DART SPEC. M304S22GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.08 lbs

DESIGN	<u>EF</u>	DART AEROSPACE LTD
DRAWN	<u> </u>	HAWKESBURY, ONTARIO, CANADA
CHECKED	<u>IP</u>	DRAWING NO. REV. D
MFG. APPR.	<u> </u>	D3245 SHEET 6 OF 7
APPROVED	<u> </u>	TITLE SCALE
DE APPR.	<u> </u>	ACCESS PANEL ASSY NTS
DATE	12.10.16	Copyright © 2012 by DART Aerospace Ltd. This document is private and confidential and is supplied on the express understanding that it is not to be used or any portion or copies be copied or communicated to any other person without written permission from DART Aerospace Ltd.

DQA:

Date:



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

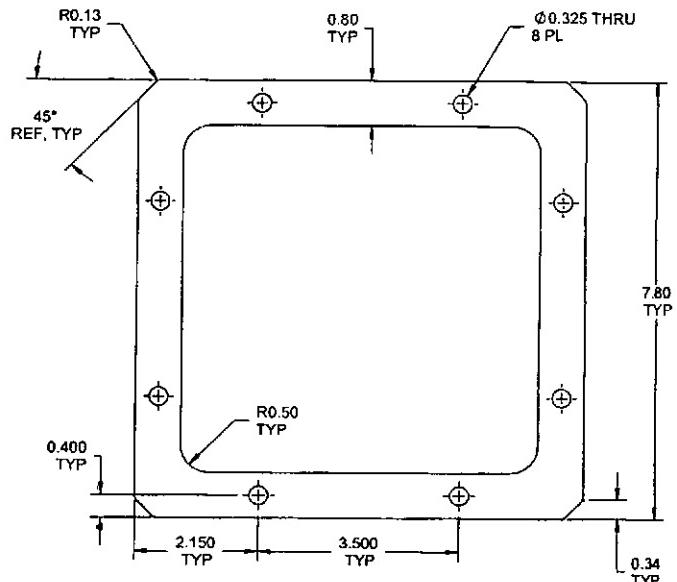
Work Order update only 

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	<b>DISPOSITION</b> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b> Skid-tube <input type="checkbox"/> Crosstube <input type="checkbox"/> Machining <input type="checkbox"/> Small Fab <input type="checkbox"/> Thermoforming <input type="checkbox"/> Finishing <input type="checkbox"/> Large Fab <input type="checkbox"/> Composite <input type="checkbox"/>  Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>  Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
---	--	---

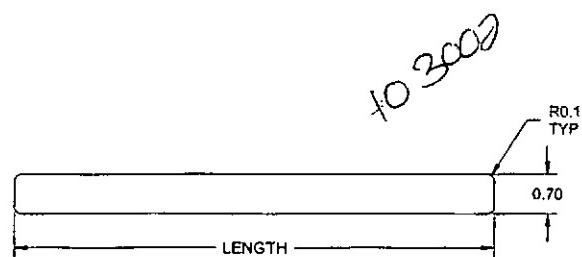
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other



D3245-7 GASKET



D3245-X GASKET

P/N	LENGTH
D3245-9	8.35
D3245-11	9.01
D3245-13	9.50

RELEASED  
2012-11-06  
JMP

DESIGN	4F	DART AEROSPACE LTD
DRAWN	4P	HAWKESBURY, ONTARIO, CANADA
CHECKED	4P	DRAWING NO. D3245 REV. D
MFG. APPR.		SHEET 7 OF 7
APPROVED	4P	TITLE
DE APPR.		SCALE
DATE	12.10.16	NTS

ACCESS PANEL ASSY

COPYRIGHT © 2014 BY DART AEROSPACE LTD.  
THE DOCUMENT IS PROPRIETARY AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS  
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISCLOSED TO ANY OTHER PERSON, WITHOUT  
THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.

- NOTES:  
 1) MATERIAL: THERMO-CHEM P/N G-89, 0.060 THICK  
     POSSIBLE SUPPLIER: A.R. THOMSON GROUP
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D3245-7 = 0.04 lbs; D3245-9/11/13 = LESS THAN 0.01 lbs

DQA:    Date:

**DART**  
AEROSPACE

## **WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

## Work Order update only

Work Order: _____	<b>DISPOSITION</b>	<b>AGAINST DEPARTMENT/PROCESS</b>					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			

**FAULT CATEGORY**

Landing Gear	General			
Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced
Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up
Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure
Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld
Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled
Crushing	Countersink	Misaligned/off center	Positioned Wrong	
Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge	
Inspection Strip in Tube	Drawing	Misread		Other
Marks/Chatter	Drill Holes	Off-set		
Turning Sequence	Finish	Out of Calibration		
Wave/Twist in Tube	Fit/Function	Out of Sequence		